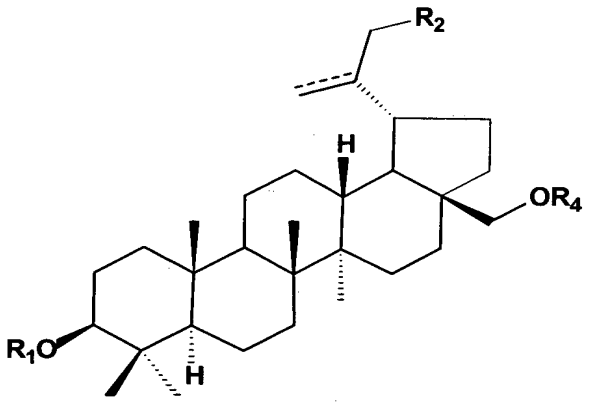
WHAT IS CLAIMED IS:

1. A compound of Formula I:



I

or a pharmaceutically acceptable salt thereof; wherein

R_1 is a C_2-C_{20} substituted or unsubstituted carboxyacyl;

R_2 is hydrogen, halogen, hydroxy or -OR_3;

R_3 is hydrogen or C_2-C_{20} substituted or unsubstituted carboxyacyl; and

R_4 is hydrogen or $C(C_6H_5)_3$;

wherein the dashed line represents an optional double bond between C20 and C29; provided that R_1 is not succinyl.

2. A compound according to claim 1, wherein R_2 is hydrogen.

3. A compound according to claim 1, wherein R_2 is halogen or -OR_3, where R_3 is hydrogen or C_2-C_{20} substituted or unsubstituted carboxyacyl.

4. A compound according to claim 1, wherein R_1 is a C_4-C_{16} carboxyalkanoyl group that is geminally substituted at the 3' carbon atom.

5. A compound according to claim 1, wherein R_1 has the formula:

$$-C(O)CH_2CR'R''(CH_2)_bCOOH$$

where R' and R" are each C_{1-4} alkyl, or R' is hydrogen and R" is C_{1-4} alkyl, or R' and R" are taken together to form a di-, tri, tetra- or pentamethylene linkage, and b is from zero to twelve.

6. A compound according to claim 5, wherein b is zero to 4.

7. A compound according to claim 6, wherein R' and R" are each methyl, and b is zero or 1.

8. A compound according to claim 1, wherein R_1 has the formula:

$$-C(O)CH_2O(CH_2)_aCOOH,$$

where a is from zero to twelve.

9. A compound according to claim 1, wherein R_2 is one of:

i. hydrogen;

ii. $-O-C(O)CH_2CR'R"(CH_2)_bCOOH$, where R' and R" are each C_{1-4} alkyl, or R' is hydrogen and R" is C_{1-4} alkyl, or R' and R" are taken together to form a di-, tri, tetra- or pentamethylene linkage, and b is from zero to twelve;

iii. $-O-C(O)CH_2O(CH_2)_aCOOH$, where a is from zero to 12; or

iv. –OH.

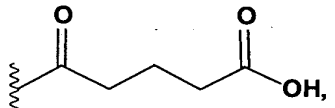
10. A compound according to claim 1, wherein R_2 is:

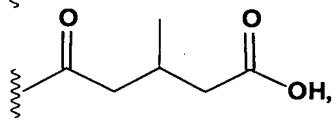
$$-O-C(O)CH_2CR'R"(CH_2)_bCOOH,$$

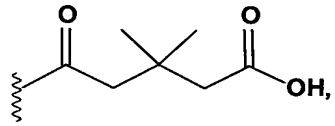
where R' and R" are each methyl, and b is zero or one.

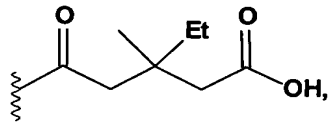
11. A compound according to claim 1, wherein:

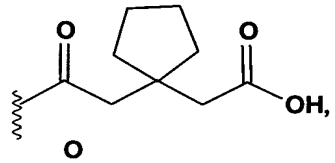
R_1 is one of:

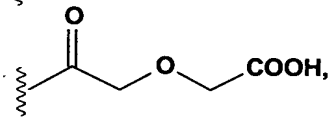


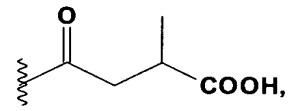


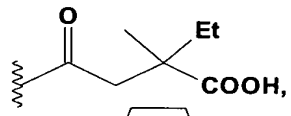


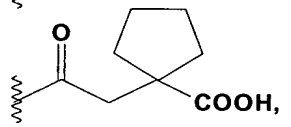












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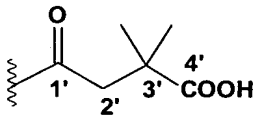
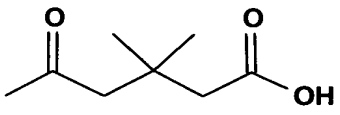


; and

R_2 is hydrogen or hydroxy.

12. A compound according to claim 1, wherein:

R_1 is



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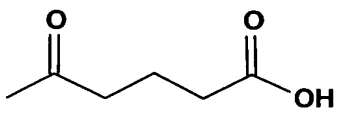

; and

R_2 is hydrogen.

13. A compound according to claim 1, wherein R_1 and R_3 can be optionally substituted with one to three hydroxy or halo.

14. A pharmaceutical composition comprising one or more compounds according to claim 1, or a pharmaceutically acceptable salt, ester, or prodrug thereof, and ester, salt, ether, sulfate, or glucuronide thereof, and a pharmaceutically acceptable carrier.

15. A pharmaceutical composition according to claim 14, further comprising one or more drugs selected from an anti-viral agent or an immunostimulating agent.

16. A pharmaceutical composition according to claim 15, wherein said antiviral agent is selected from the group consisting of one or more of zidovudine, lamivudine, zalcitabine, stavudine, didanosine, tenofovir, abacavir, nevirapine, delavirdine, emtricitabine, efavirenz, saquinavir, ritonavir, indinavir, nelfinavir, lopinavir, amprenavir, atazanavir, enfuvirtide, hydroxyurea, interleukin-2, gamma globulin, amantadine, guanidine hydroxybenzimidazole, interferon-α, interferon-β, interferon-γ, a thiosemicarbazone, methisazone, rifampin, ribavirin,

a pyrimidine analog, a purine analog, foscarnet, phosphonoacetic acid, acyclovir, a dideoxynucleoside, and gancyclovir.

17. A pharmaceutical composition comprising one or more compounds according to claim 5, or a pharmaceutically acceptable salt, ester, or prodrug thereof, ester, salt, ether, sulfate, or glucuronide thereof, and a pharmaceutically acceptable carrier.

18. A pharmaceutical composition according to claim 17, further comprising a drug selected from an anti-viral agent or an immunostimulating agent.

19. A pharmaceutical composition according to claim 18, wherein said antiviral agent is selected from the group consisting of one or more of zidovudine, lamivudine, zalcitabine, stavudine, didanosine, tenofovir, abacavir, nevirapine, delavirdine, emtricitabine, efavirenz, saquinavir, ritonavir, indinavir, nelfinavir, lopinavir, amprenavir, atazanavir, enfuvirtide, hydroxyurea, interleukin-2, gamma globulin, amantadine, guanidine hydroxybenzimidazole, interferon-α, interferon-β, interferon-γ, a thiosemicarbazone, methisazone, rifampin, ribavirin, a pyrimidine analog, a purine analog, foscarnet, phosphonoacetic acid, acyclovir, a dideoxynucleoside, and gancyclovir.

20. A method for inhibiting a retroviral infection in cells or tissue of an animal comprising administering an effective retroviral inhibiting amount of a pharmaceutical composition according to claim 14.

21. The method according to claim 20, wherein said composition is administered to provide said compound in an amount ranging from about 0.1 to about 100 mg/kg body weight.

22. The method according to claim 21, wherein said composition is administered to provide said compound in an amount ranging from about 5 to about 25 mg/kg body weight.

23. The method according to claim 22, wherein said animal is a human.

24. A method for treating a patient suffering from a retroviral related pathology, comprising administering to said subject a retroviral inhibiting effective amount of a pharmaceutical composition according to claim 14.

25. A method according to claim 24 wherein said retroviral related pathology is an HIV infection.

26. A method of treating a patient suffering from a retroviral-related pathology, comprising administering to said patient a retroviral inhibiting effective amount of one or more compounds of Formula I as claimed in claim 1 in combination with one or more anti-viral agents.

27. The method according to claim 26 wherein said anti-viral agent is selected from the group consisting of one or more of AZT, 3TC, ddI, ddC, D4T, zidovudine, lamivudine, zalcitabine, stavudine, didanosine, tenofovir, abacavir, nevirapine, delavirdine, emtricitabine, efavirenz, saquinavir, ritonavir, indinavir, nelfinavir, lopinavir, atazanavir, enfuvirtide, and amprenavir.

28. A method of preventing transmission of HIV infection from an HIV infected pregnant woman to a fetus, comprising administering to said woman and/or said fetus a retroviral inhibiting effective amount of a compound

of Formula I as claimed in claim 1 during pregnancy or immediately prior to, at, or subsequent to birth.

29. A method of preventing transmission of HIV infection during sexual intercourse, comprising applying a retroviral inhibiting effective amount of a topical composition including one or more compounds of Formula I as claimed in claim 1 to vaginal or other mucosa prior to sexual intercourse.